

REMARKS

Drawing Objections

Fig. 3 of the drawing was objected to because the reference numbers 33, 40, and 44 were not mentioned in the description. Paragraphs 33 and 34 have been amended to make reference to reference numbers 33, 40, and 44. Fig. 5 of the drawings was objected to because the reference number 60 was used to refer to two different things. One of the numbers 60 has been changed to number 66, and Paragraph 37 has been amended to refer to reference number 66.

Specification Objections

Paragraph 43 has been amended as suggested by the Examiner to change “DNS-Trp” to – DNS-GABA-. Paragraph 38 has been amended to support Claim 16. A new paragraph has been added after Paragraph 15 in the summary which recites the auxiliary agents of Claims 18 and 19 to support Claims 18 and 19. The amendments to Paragraph 38 and the addition of the new paragraph do not add new matter as they merely recite what was disclosed in original Claims 16, 18, and 19. Claims 31-34 have been cancelled. Claim 24 has been amended to end in a period and Claims 35, 36, and 37 have been amended to correct the spelling of “ampholytes”.

Claim Rejections

The Examiner has rejected most of the claims of the application as anticipated by one of Vigh et al., Speicher et al., or Shave et al. In each case, the Examiner says that the particular

reference being applied “discloses a method of improving a concentration detection limit for an ampholytic analyte in an isoelectric focusing system”. However, applicant submits that none of the systems disclosed in the references are “isoelectric focusing systems”. Therefore, the independent method Claims 1, 2, 35 and 37 which all require the step of “providing an isoelectric focusing system” are not infringed because the references do not provide isoelectric focusing systems and the independent apparatus Claims 22 and 23 which require means for effecting isoelectric focusing are not anticipated because the references do not effect isoelectric focusing.

Each of the of Vigh et al., Speicher et al., and Shave et al. references teach isoelectric trapping systems and effect isoelectric trapping where charged membranes in the sample chamber are used to establish traps for the charged molecules to be separated. The separation is directed by the charged membranes, not merely by establishing a charge across the sample chamber. In the trapping systems of the references, there is no reason to use applicant’s claimed system of adding applicant’s auxiliary components or using applicant’s auxiliary compartments when charged membranes are present in the separation chamber as such auxiliary components or chambers will not increase the ampholytic analyte concentration in a sample chamber provided with charged membranes therein. It is only in sample chambers without charged membranes that applicant’s system will provide an improvement and increased concentrations. Applicant’s system has application specifically in capillary isoelectric focusing systems which use capillary sample chambers where, because of the capillary size of the sample chambers, it is not currently

possible to place membranes in the sample chambers. Further, because of the capillary size of the sample chambers, only very small samples can be used. Therefore, it is advantageous to have a system for increasing the concentration of ampholytic analytes in capillary isoelectric focusing systems because the trap systems cannot be used and only very small samples are used. Further, the systems of the references are specifically directed to isoelectric trapping systems which use the charged membranes to direct separation. There is no suggestion that any of the cited systems could be used to provide any benefit in an isoelectric focusing system which does not use charged membranes, and there is no suggestion that any of the cited systems could be used in a capillary isoelectric focusing system.

Although the title of the Speicher et al. patent is "Method and Device for Separation of Charged Molecules by Solution Isoelectric Focusing", a person skilled in the art reading the Speicher et al. patent or looking at the drawings would immediately recognize that the Speicher et al. system is an isoelectric trapping system rather than an isoelectric focusing system such as required by applicant's claims, and would realize that applicant's system would provide no advantage in, and thus there is no reason to use applicant's system, in any of the systems of the references.

The claims in the application not rejected as anticipated by one of the above three cited references have been rejected as obvious from one of the above three cited references in view of a secondary reference. However, since none of the above three cited references show or suggest

applicant's system, the cited secondary references do not add anything to the principal references to make applicant's system obvious.

Check No. 6193, in the amount of \$525.00, is enclosed for a three month extension of time. The Commissioner is hereby authorized to charge any additional fee or to credit any overpayment in connection with this Amendment to Deposit Account No. 20-0100.

DATED this 6th day of March, 2008.

Respectfully submitted,



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